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ELECTRODE AND INSULATION ASSEMBLY FOR A LEAD AND METHOD THEREFOR

IN THE CLAIMS

Please amend the claims as follows:

1. (Canceled)

- The lead assembly as recited in claim [[1]] 36, wherein the inner 2. (Currently Amended) electrode and the outer electrode are coupled together along at least one coupling projection extending between the inner electrode outer surface and the an outer electrode inner surface.
- The lead assembly as recited in claim 2, wherein the inner 3. (Previously Presented) electrode outer surface includes the at least one coupling projection extending therefrom.
- The lead assembly as recited in claim 3, wherein the at least one 4. (Currently Amended) coupling projection is defined in part by a projection outer surface, the projection outer surface including alignment features the one or more sight marks thereon.
- The lead assembly as recited in claim [[4]] 36, wherein the outer (Currently Amended) electrode means for aligning further includes one or more outer electrode alignment features therein
- The lead assembly as recited in claim 5, wherein the one or more 6. (Currently Amended) outer electrode alignment features include at least one sight hole extending from an outer electrode outer surface to the an outer electrode inner surface.

7. (Canceled)

The lead assembly as recited in claim 2, wherein the at least one 8. (Currently Amended) coupling projection has a cross-section with one or more substantially flat sides.

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- 9. (Withdrawn) The lead assembly as recited in claim 2, wherein the inner electrode extends from a first end to a second end, and the at least one coupling projection extends substantially from the first end to the second end.
- 10. (Previously Presented) A lead assembly comprising:

at least one conductor extending from a conductor proximal end to a conductor distal end; an inner ring electrode coupled with the at least one conductor, the inner ring electrode defined in part by an inner electrode inner surface, an inner electrode outer surface and inner electrode end surfaces:

an outer electrode disposed over the inner ring electrode, the outer electrode coupled with at least a portion of the inner ring electrode, the inner ring electrode and the outer electrode having a void therebetween;

insulative material disposed between a portion of the inner ring and outer electrodes within the void; and

the inner ring electrode and the outer electrode coupled together along at least one nonannular coupling projection disposed between the inner ring electrode and the outer electrode.

- 11. (Withdrawn) The lead assembly as recited in claim 10, wherein the at least one non-annular coupling projection has a coupling projection length substantially as long as the inner ring electrode.
- 12. (Original) The lead assembly as recited in claim 10, wherein the at least one non-annular coupling projection has a projection length substantially as long as the outer electrode.
- 13. (Original) The lead assembly as recited in claim 10, wherein the insulating material is a preformed component.
- 14. (Original) The lead assembly as recited in claim 10, wherein the insulating material includes at least one recess, and the at least one non-annular coupling projection is disposed within the at least one recess.

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15. (Original) The lead assembly as recited in claim 14, wherein the at least one recess is smaller than the at least one non-annular coupling projection.

16. (Previously Presented) A lead assembly comprising:

at least one conductor extending from a conductor proximal end to a conductor distal end; an inner electrode defined in part by an inner electrode inner surface, an inner electrode outer surface, a first end, and a second end, the inner electrode inner surface coupled with, and substantially surrounding, the at least one conductor along a portion of an inner electrode length;

an outer electrode disposed over the inner electrode, the outer electrode coupled with at least a portion of the inner electrode, the inner electrode and the outer electrode having a void therebetween:

insulative material disposed between a portion of the inner and outer electrodes within the void, the insulative material extending between the first end and the second end; and

the inner electrode and the outer electrode coupled together along at least one coupling projection disposed between the inner electrode and the outer electrode.

- 17. (Original) The lead assembly as recited in claim 16, wherein the at least one coupling projection has a projection length substantially as long as the outer electrode.
- 18. (Original) The lead assembly as recited in claim 16, wherein insulation is a preformed component.
- 19. (Original) The lead assembly as recited in claim 18, wherein insulation includes at least one recess, and the at least one coupling projection is disposed within the at least one recess.
- 20. (Original) The lead assembly as recited in claim 16, wherein the inner electrode includes the at least one coupling projection extending therefrom.

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- 21. (Original) The lead assembly as recited in claim 16, wherein the at least one coupling projection is defined in part by a projection outer surface, the projection outer surface including alignment features thereon.
- 22. (Original) The lead assembly as recited in claim 21, wherein the outer electrode includes one or more outer electrode alienment features therein.
- 23. (Canceled)
- 24. (Currently Amended) The lead assembly as recited in claim [[23]] 48, wherein the one or more outer electrode alignment features includes a sight hole therein.
- 25-34. (Canceled)
- 35. (Previously Presented) A lead assembly comprising:

at least one conductor extending from a conductor proximal end to a conductor distal end; an inner electrode coupled with the at least one conductor, the inner electrode defined in part by an inner electrode inner surface, an inner electrode outer surface and inner electrode end surfaces:

an outer electrode disposed over the inner electrode, the outer electrode coupled with at least a portion of the inner electrode along at least one annular coupling projection, the inner electrode and the outer electrode having a void therebetween; and

insulative material disposed between a portion of the inner and outer electrodes within the void, the insulative material extending between an outer electrode inner surface to at least a portion of the inner electrode outer surface. Filing Date: March 30, 2004

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A lead assembly comprising: 36. (Previously Presented)

at least one conductor extending from a conductor proximal end to a conductor distal end; an inner electrode coupled with the at least one conductor, the inner electrode defined in part by an inner electrode inner surface, an inner electrode outer surface, a first end, and a second end:

an outer electrode disposed over the inner electrode, the outer electrode coupled with at least a portion of the inner electrode, the inner electrode and the outer electrode having a void therebetween:

insulative material disposed between a portion of the inner and outer electrodes within the void: and

means for aligning the outer electrode with the inner electrode for the coupling process, including, at least in part, one or more sight marks on the inner electrode.

37. (Previously Presented) A lead assembly comprising:

at least one conductor extending from a conductor proximal end to a conductor distal end; an inner electrode coupled with the at least one conductor, the inner electrode defined in part by an inner electrode inner surface, an inner electrode outer surface, a first end, and a second end:

an outer electrode disposed over the inner electrode, the outer electrode coupled with at least a portion of the inner electrode, the inner electrode and the outer electrode having a void therebetween:

insulative material disposed between a portion of the inner and outer electrodes within the void: and

means for aligning the outer electrode with the inner electrode for the coupling process, including, at least in part, one or more sight marks formed on a coupling projection of the inner electrode.

The lead assembly as recited in claim [[1]] 37, wherein the 38. (Currently Amended) insulative material comprises silicone tubing.

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- 39. (Currently Amended) The method as recited in claim [[27]] 35, further-comprising forming-wherein the inner electrode is formed using at least one of injection molding or EDM electrical discharge machining.
- 40. (New) The lead assembly as recited in claim 10, wherein the at least one non-annular coupling projection has a substantially square shaped cross-section.
- 42. (New) The lead assembly as recited in claim 19, wherein the at least one recess is smaller than the at least one coupling projection.
- 43. (New) The lead assembly as recited in claim 35, wherein an outer surface of the at least one annular coupling projection includes a slightly rounded outer profile.
- 44. (New) The lead assembly as recited in claim 35, wherein the at least one annular coupling projection extends from a portion of the inner electrode outer surface.
- 45. (New) The lead assembly as recited in claim 35, wherein the insulative material includes a preformed component.
- 46. (New) The lead assembly as recited in claim 35, wherein the insulative material includes a polymer overmolded on the inner electrode.
- 47. (New) The lead assembly as recited in claim 37, wherein the one or more sight marks include one or more cross-hairs formed, printed, or etched on a portion of the inner electrode.
- 48. (New) The lead assembly as recited in claim 37, wherein the means for aligning further includes one or more outer electrode alignment features.

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49. (New) The lead assembly as recited in claim 37, wherein the insulating material includes a preformed component, the preformed component having at least one recess smaller in size than the coupling projection of the inner electrode.

50. (New) The lead assembly as recited in claim 37, wherein the insulative material includes a polymer overmolded on the inner electrode.